

REMARKS

This application has been reviewed in light of the Office Action dated March 19, 2003. Claims 51-57 are presented for examination. Claim 51 has been amended to define more clearly what Applicant regards as his invention. Claim 51 is in independent form. Favorable reconsideration is requested.

In the Office Action, Claims 51-56 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,677,725 (Honbo et al.) in view of U.S. Patent 5,666,132 (Ochi et al.). Claim 57 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Honbo et al. in view of Ochi et al., and further in view of U.S. Patent 6,278,234 (Ono et al.).

As amended, independent Claim 51 is directed to an image forming apparatus comprising a display panel (1) adapted to display an image, a pulse width modulation signal generator (6) adapted to input digital data (XD_1 - XD_{480}) corresponding to the image and a clock signal (PCLK), and to count the clock signal for the digital data to generate a pulse width modulation signal (PWMout) for driving the display panel, and a clock generator (Figs. 31 and 36) for generating the clock signal. The clock generator is provided with a memory (203 in Fig. 31, 211 in Fig. 36) for storing a plurality of items of data, and the clock generator is arranged to generate the clock signal in accordance with one (e.g., as shown in Fig. 32) of the items of data read from the memory in synchronism with a reference clock signal (nPCLK).

The reference numerals and figures identified above are for illustrative purposes only, and the embodiments associated therewith are not intended to be limiting to the scope of the claimed subject matter.

Honbo et al. discloses outputting signals Ps 119 and Pr 120 having a predetermined pulse-width which lags a reference signal tr by times of ds and dr , respectively, and also discloses generating a signal Pw 121 having a pulse-width corresponding to a phase difference between the signals Ps 119 and Pr 120.

Ochi et al. discloses a driver 910 having a memory 910a storing an image signal of each 4bit data, and a pulse-width modulator 910b for generating a pulse-width modulation signal corresponding to the image signal.

However, it is respectfully submitted that nothing in either Honbo et al. and Ochi et al. would teach or suggest a pulse width modulation signal generator which inputs digital data corresponding to an image and a clock signal, and which counts the clock signal for the digital data to generate a pulse width modulation signal, as recited in Claim 51.

The Office Action asserts that Honbo et al. discloses “a clock signal wherein said clock is provided with a memory for storing a plurality of data and said clock is arranged to generate the clock signal in accordance with one of the items of data read from the memory in synchronism with a reference clock signal (col. 1 line 56 to col. 2, line 10, col. 11, lines 3-17, figs. 2, 17)”. However, in Honbo et al. a delay time controller 101 inputs a digital image signal, a reference clock, an offset amount, and the like, and outputs delay time data ds 116, dr 117, and a reference signal tr 118. None of these elements, nor any other portion of Honbo et al., would teach or suggest generating a clock signal in

accordance with one of the items of data read from a memory for storing a plurality of items of data, in synchronism with a reference clock signal, as recited in Claim 51.

Accordingly, for all of the foregoing reasons, it is believed that Claim 51 is clearly patentable over Honbo et al. in view of Ochi et al., whether considered separately or in combination.

A review of the other art of record, including Ono et al., has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above as references against independent Claim 51 herein. That claim is therefore believed patentable over the art of record.

The other claims in this application depend from Claim 51 discussed above, and, therefore, are submitted to be patentable for at least the same reasons as is Claim 51. Since each dependent claim is also deemed to define an additional aspect of the invention, individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York Office by

telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,



Attorney for Applicant

Registration No. 42426

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

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